Key Generation and SFTP Instructions

Private and Public Key Generation

To provide Wyoming districts with a high level of security for student information, the National Transcript Center now uses a Private and Public Key authentication for connecting to the secured FTP (SFTP) site used for receiving extract files from the school districts. PuTTY Key Generator can be used to create the Private and Public Key pair.

For PC users (Macintosh users see page 4):

1. Download the PuTTY Key Generator to your desktop.
   http://the.earth.li/~sgtatham/putty/latest/x86/puttygen.exe

2. Click on the PuttyGen.exe icon on your desktop.

3. When PuTTY Key Generator starts you should see the screen as in Figure 1.

4. Make sure SSH-2 RSA is selected at the bottom.

Figure 1

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5. Click on the Generate button and you will be asked to move the mouse. The screen will appear as in Figure 2.
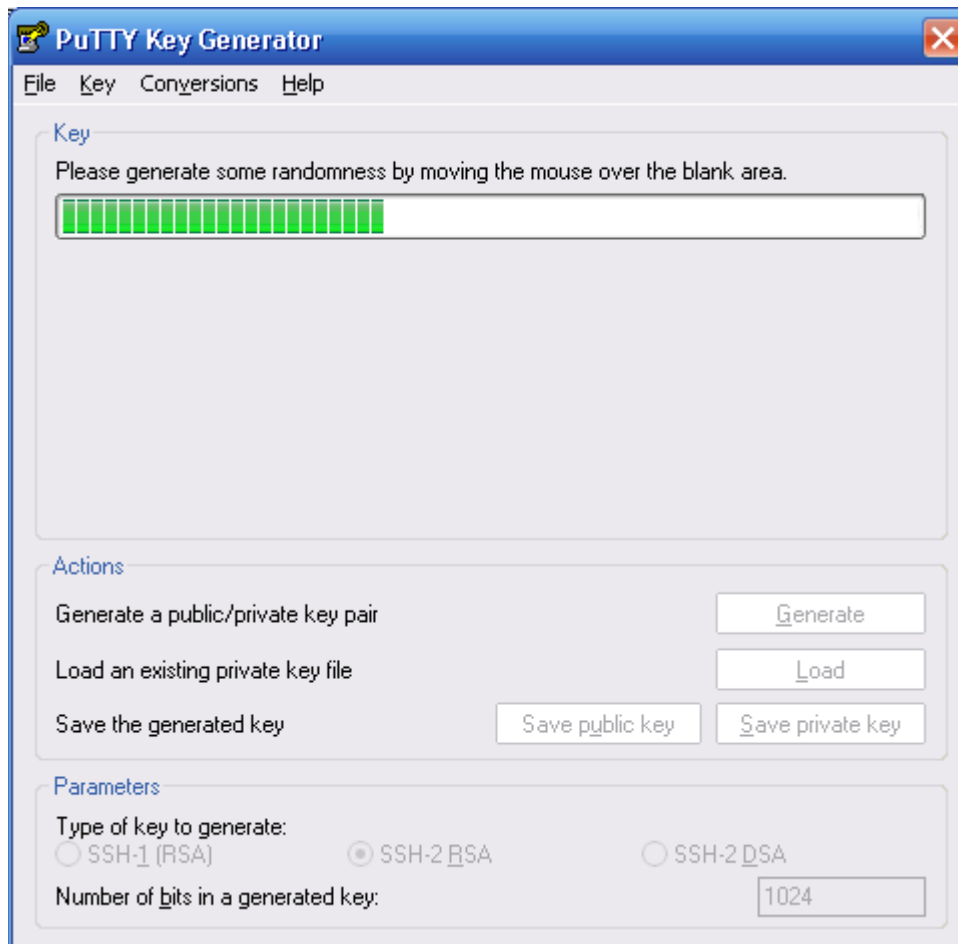

Figure 2

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6. The top box contains the Public Key. You will need to copy this public key from the top box and email it to ntcsupport@hobsons.com. It is safe to email the public key.

Note: For you to be able to connect to the SFTP this public key must be sent.

Figure 3

7. You will then need to decide whether to put a passphrase on your private key.
    *   If you enter a passphrase on this screen, you will be prompted for it when connecting to the SFTP site.
    *   If everyone using your computer (everyone able to access the stored private key) is authorized to upload to the SFTP site then you may choose not to use a passphrase.

8. Next you will need to click on the Save Private Key button.

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9. Enter a name for your District's Private Key and be sure to remember where the file is located. Click Save.
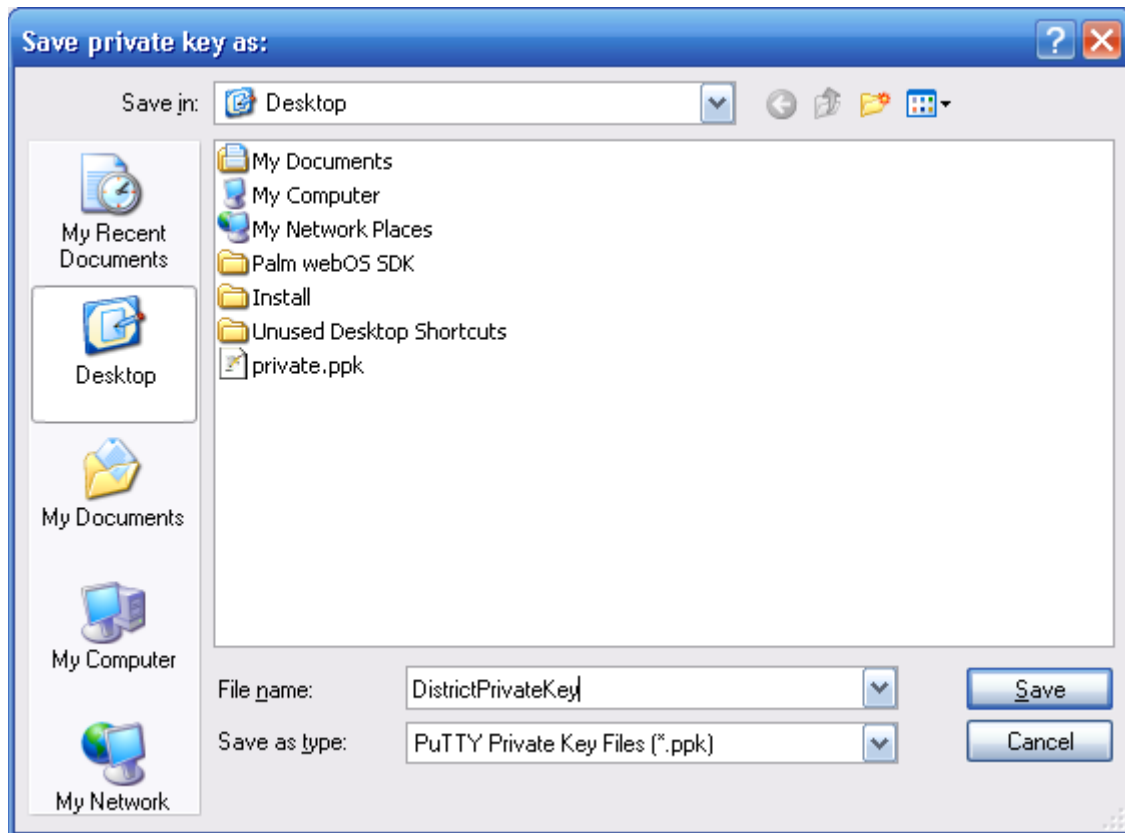

Figure 4

10. Now that you have emailed the public key and have saved your private key; you are ready to proceed to the FileZilla setup.

For Mac users:

1. Open the Terminal and navigate to the folder where you want the keys to be saved.
2. Run the ssh-keygen command.
3. You will be asked for a file name in which the key should be saved. Enter a name for your District's Private Key.
4. You will then be asked for a passphrase (password) for the key. You will need to decide whether to put a passphrase on your private key. If you enter a passphrase you will be prompted for it when connecting to the SFTP site. If everyone using your computer (everyone able to access the stored private key) is authorized to upload to the SFTP site then you may choose not to use a passphrase.
5. Your private key will have the name that you choose and the public key will have that same name with .pub at the end.
6. You will need to email the public key (.pub) to ntcsupport@hobsons.com. It is safe to email the public key.
    Note: For you to be able to connect to the SFTP this public key must be sent.
7. Now that you have emailed the public key and have created your private key; you are ready to proceed to the FileZilla setup.

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FileZilla Setup

1. FileZilla can be downloaded from the following website: http://filezilla-project.org/
   - Click on the 'Download FileZilla Client'. Choose the file corresponding with your type of computer.

2. Open the FileZilla Setup file to install the program using the defaults.

3. Click on the FileZilla icon on your desktop to open FileZilla.

4. Click Edit from the menu and choose Settings from the drop down menu. The screen shown in Figure 5 should appear.
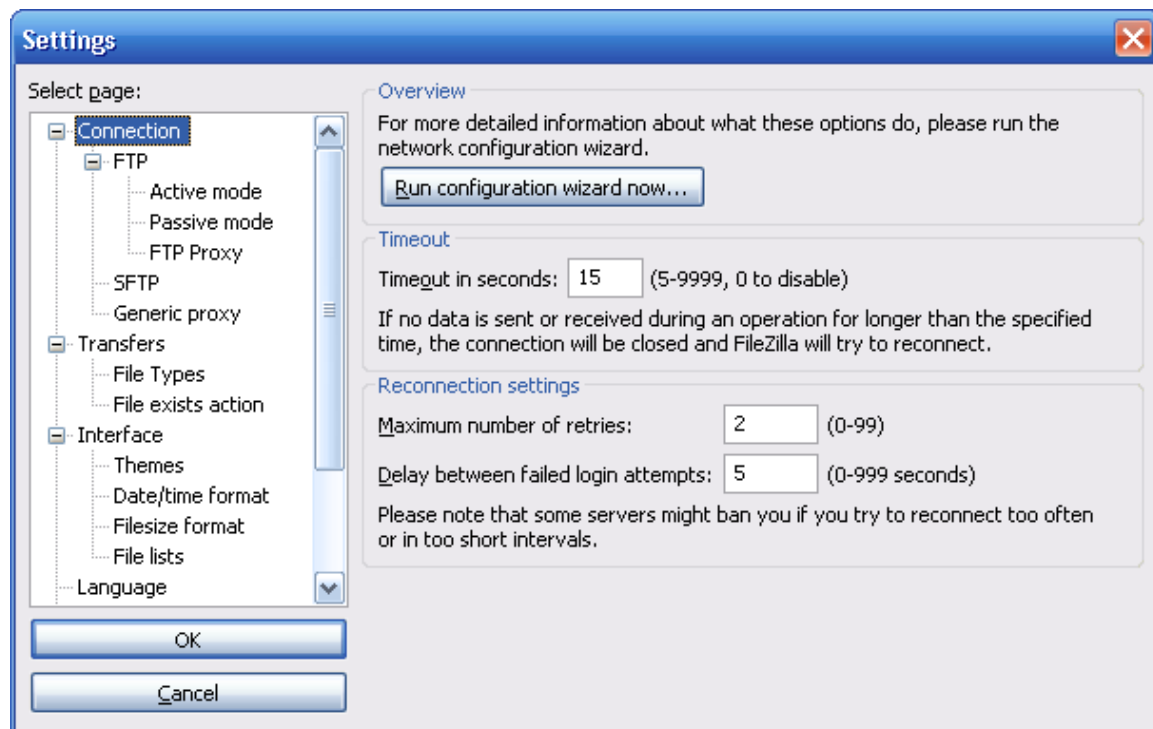
Figure 5

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5. Click on SFTP under the Connection options and a screen like Figure 6 will appear.

6. Click on the Add keyfile button and choose the private key that you saved to your computer during the Key Generation instructions above.
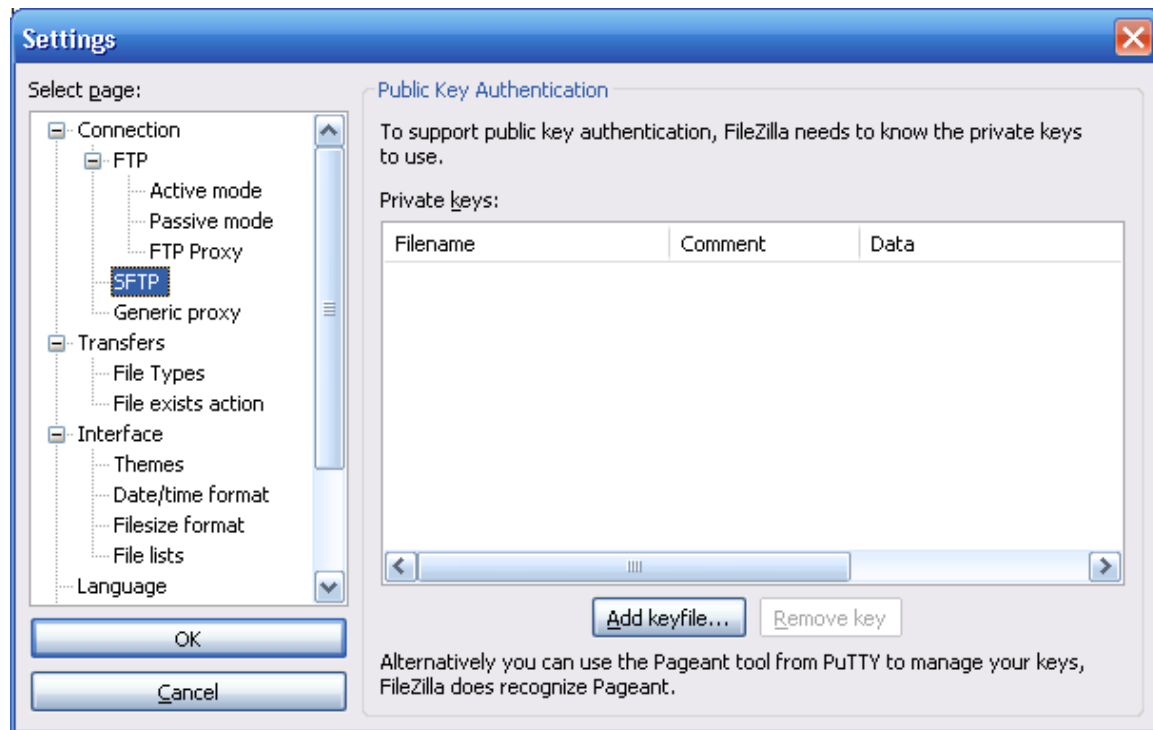
Figure 6

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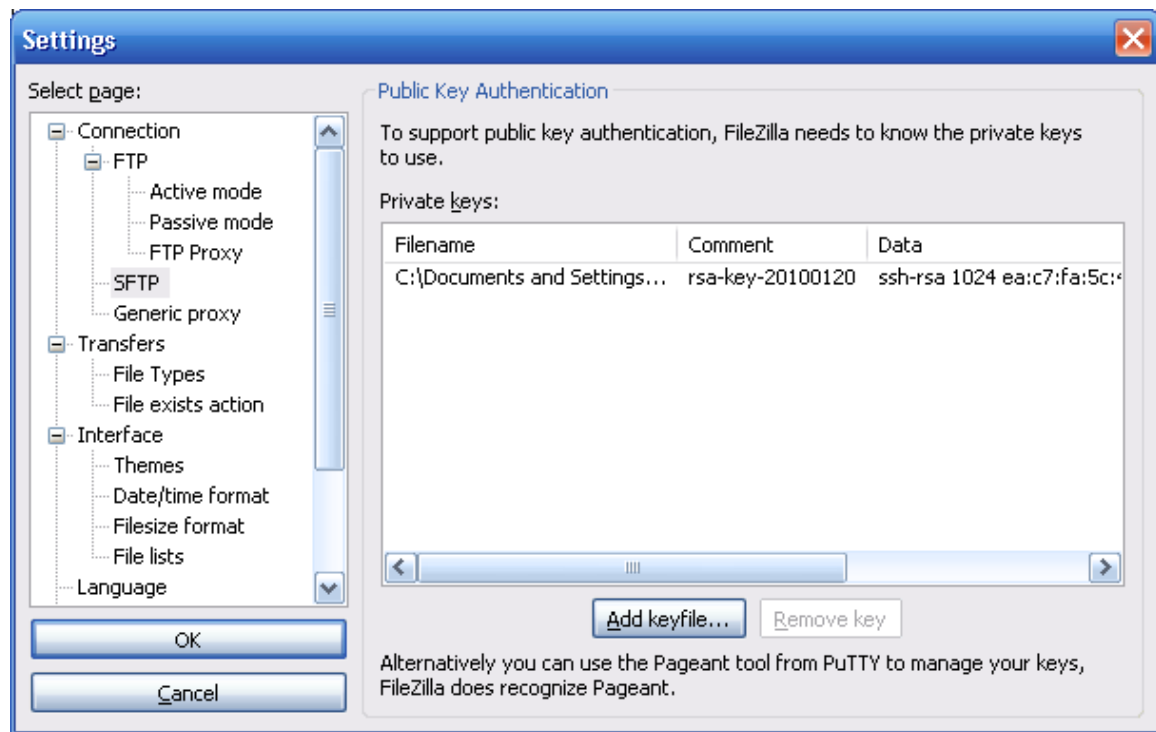7. Once your private key appears in the box as in Figure 7 then click on OK.

Figure 7

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8. Click File from the menu and choose Site Manager from the drop down menu as shown in Figure 8.
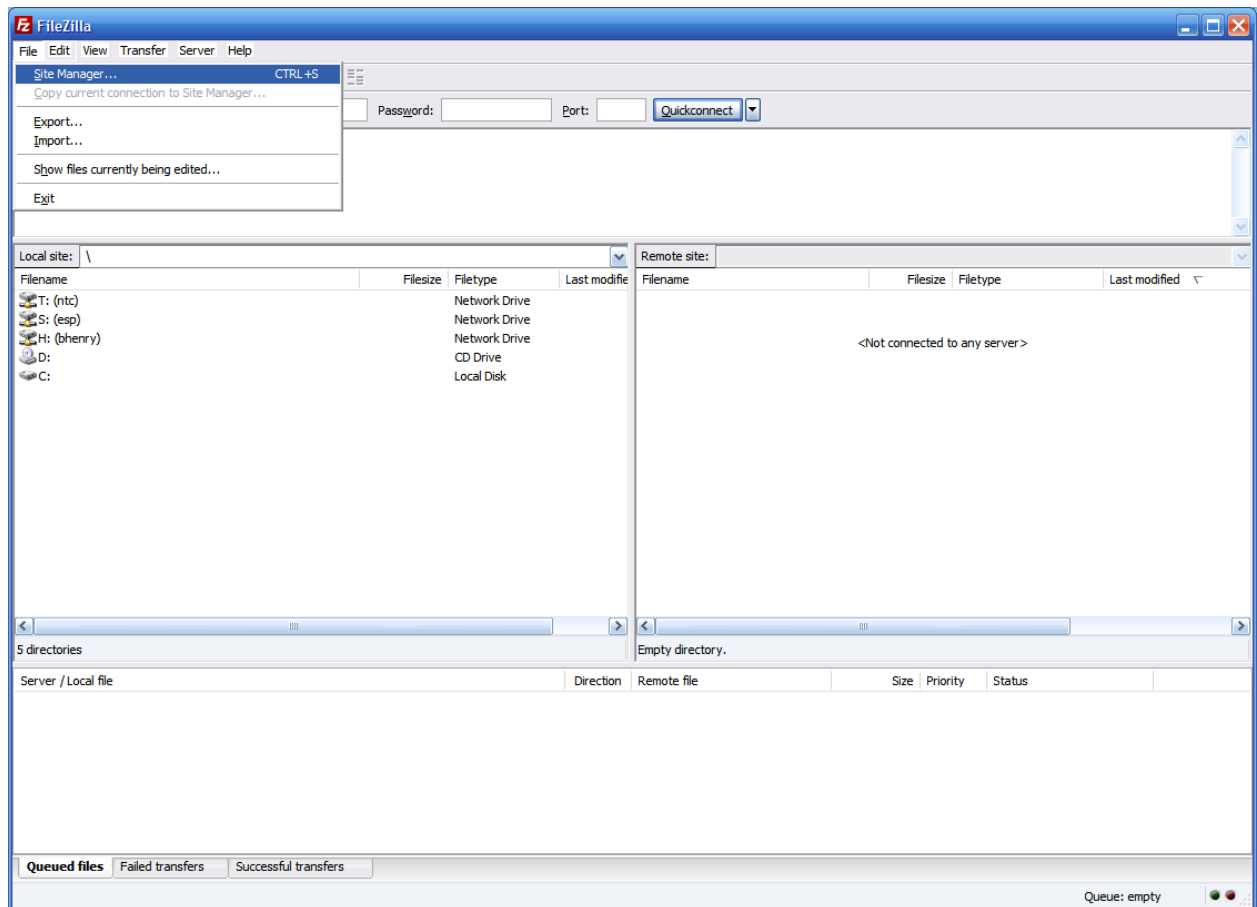

Figure 8

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9. The Site Manager configuration window should open as seen in Figure 9.
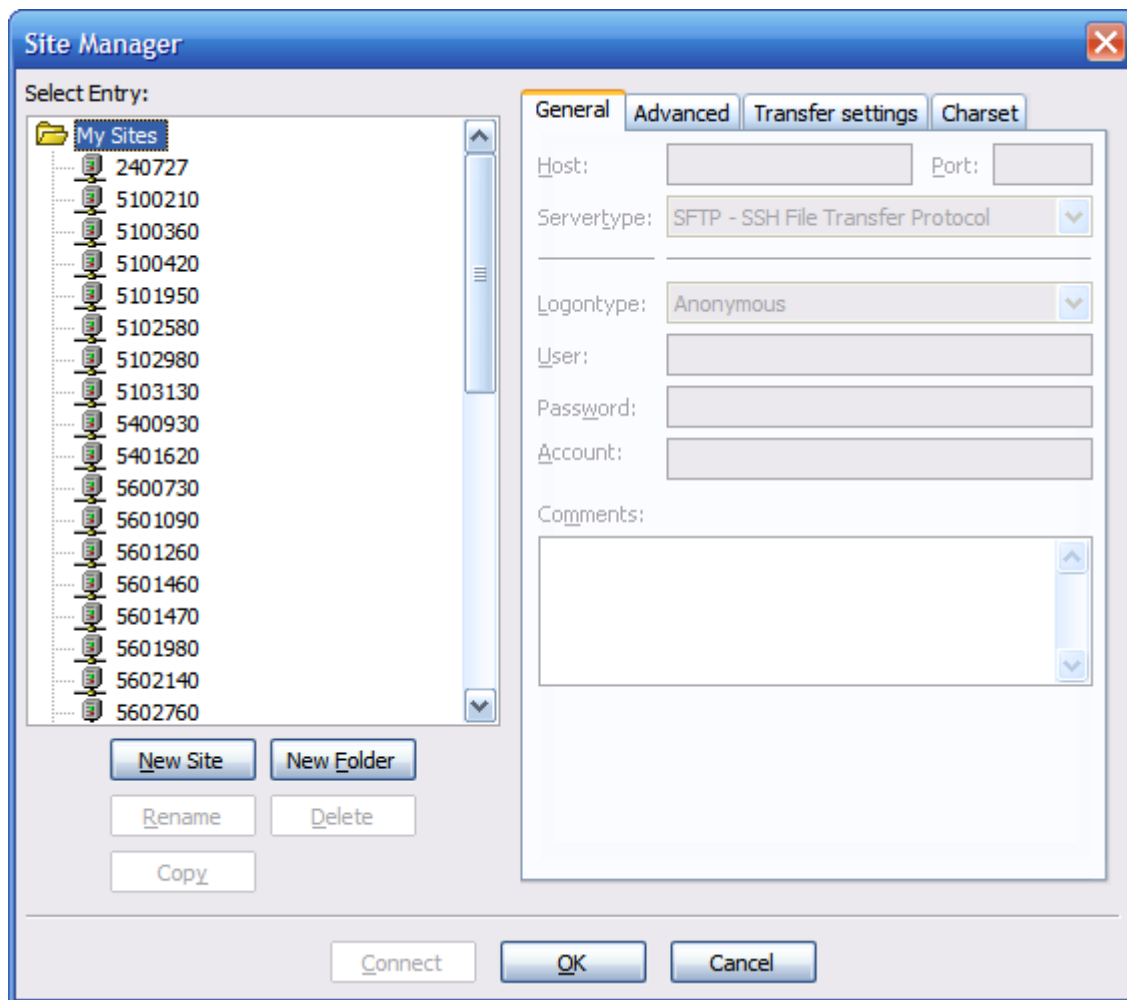

Figure 9

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10. Click on the New Site button and rename the default site name to the name of your choice.
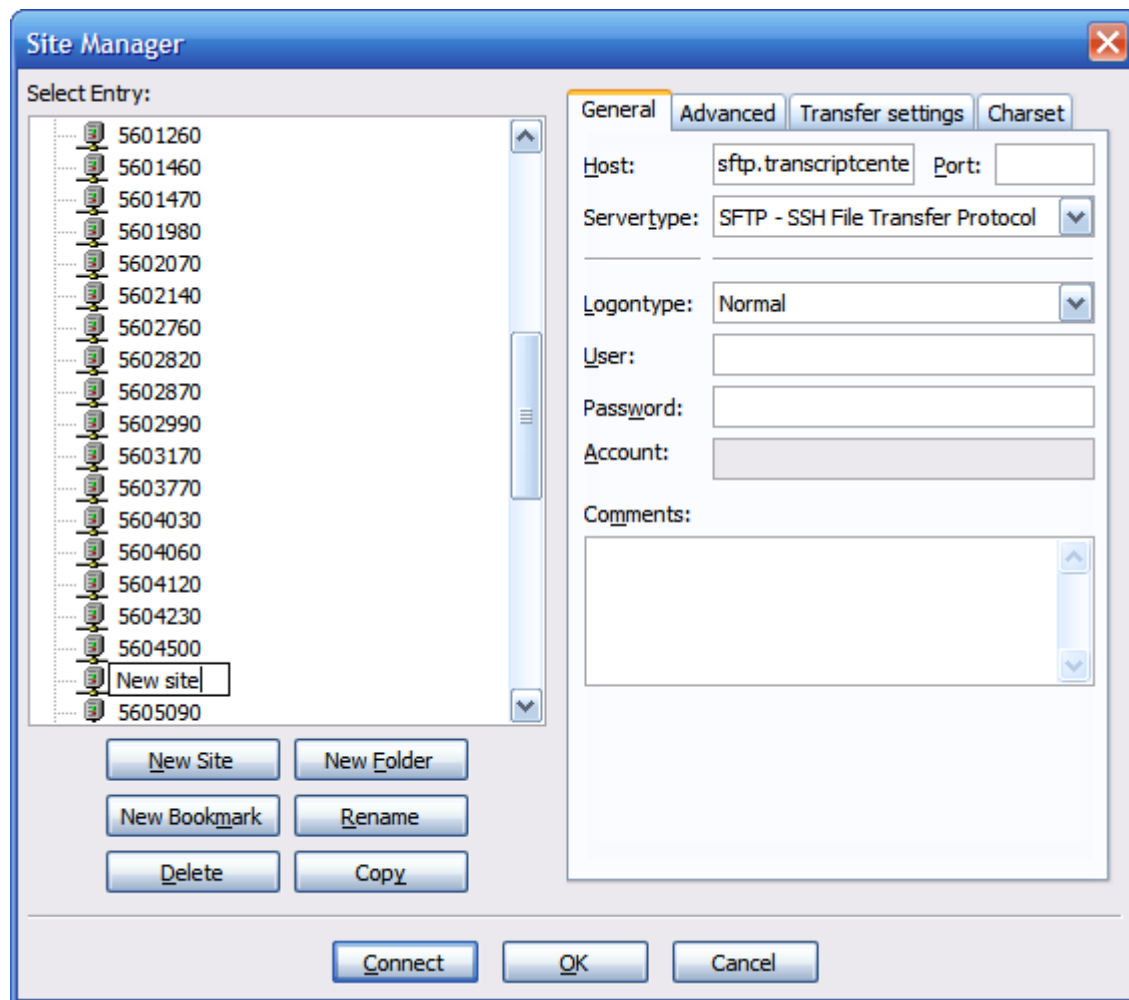

Figure 10

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11. Next, configure the WTC SFTP site connection using
    Host: **sftp.transcriptcenter.com**
    Servertype: **SFTP – SSH File Transfer Protocol**
    Logontype: **Normal**
    User: **Your NCES District ID**
        You can find your NCES District ID at http://nces.ed.gov/ccd/districtsearch/ or by
        contacting Hobsons at ntcsupport@hobsons.com.
    Password is left blank and not needed since the private key file was added previously to your
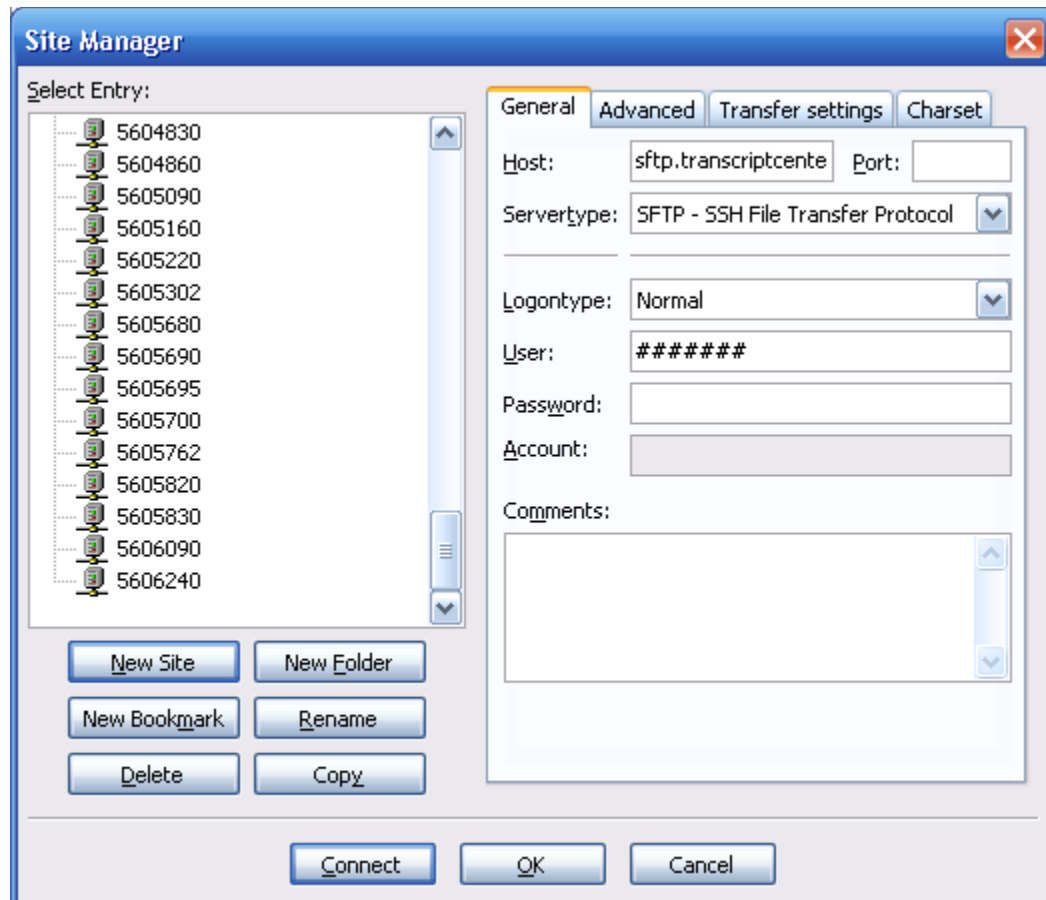   setting.

12. Click on Connect as seen in Figure 11.

Figure 11

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13. ** During future submissions you can start on this step by opening FileZilla and choosing the connection that you just created in the Site Manager. (This requires that the private key and connection is not removed from your computer)

14. When successfully connected, FileZilla should show "Status: Directory listing successful" as shown in Figure 12.
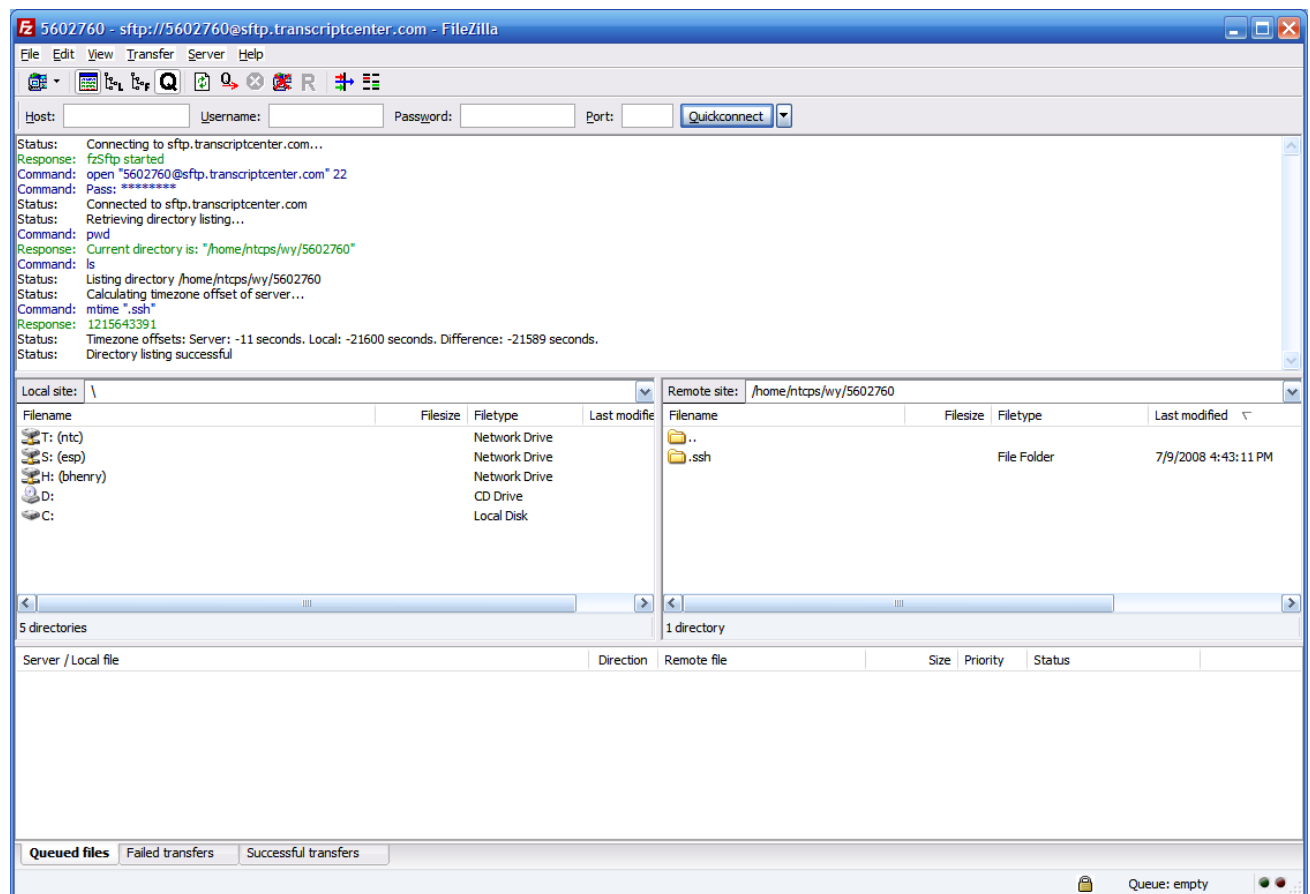

Figure 12

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15. Once connected, locate the 'Local site' box and navigate to the location where your extract files are located.

16. You can now send your SIS extracts to NTC by dragging the files from the left box labeled 'Local Site' to the box on the right labeled 'Remote Site'. Your files are submitted once you see the files in the box labeled 'Remote Site'.

If you encounter any problems or errors connecting to the SFTP site or if you have general NTC use questions please contact NTC Support at ntcsupport@hobsons.com or 877-235-9724.